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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/671,748	09/26/2003	William Z. Guan	AVA-P012	9354
47389	7590	08/08/2005	EXAMINER	
MOSER, PATTERSON & SHERIDAN, LLP AVANEX CORPORATION 3040 POST OAK BLVD SUITE 1500 HOUSTON, TX 77056			ESTRADA, ANGEL R	
			ART UNIT	PAPER NUMBER
			2831	

DATE MAILED: 08/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/671,748

Applicant(s)

GUAN ET AL.

Examiner

Angel R. Estrada

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 14-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,2,6 and 7 is/are allowed.
- 6) ☒ Claim(s) 14-26 is/are rejected.
- 7) ☒ Claim(s) 4 and 5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/7/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 4 and 16 are objected to because of the following informalities:

Claim 4 line 2, "the wall of the cylindrical shaped slot", lacks antecedent basis.

Claim 16 recites that the lid and the module housing are made of a hard aluminum material; but claim 15 recites that they are made of a soft aluminum material. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 14 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Saito (US 5,994,643).

Regarding claim 14, Saito discloses a fiber optic module package (see figure 1), comprising: a lid (7); and a module housing (1) having a cavity (14), wherein the lid (7) and the module housing (1) are sealed together using a metal-to-metal contact sealing means for hermetically sealed the lid (7) and the module housing (1); and wherein the lid (7) and the module housing (1) are held together when a portion of the lid enters into the cavity with holding pressure points that interlocks the lid and the module housing (see figures 6 and 7; or column 4 lines 36-47).

Regarding claim 24, Saito discloses the fiber optic module package (see figure 1), wherein a cross-section of the module-housing (1) cavity is substantially rectangular shaped (see figure 1).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saito (US 5,994,643).

Regarding claim 25, Saito discloses the claimed invention except for the cross-section of the module-housing cavity being substantially triangular shaped. It would have been an obvious matter of design choice to change the shape of the module

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housing from one that has a substantially rectangular cross section to one that has cross-section substantially triangular shaped, since such a modification would have involved a mere change in the shape of a component. Where the instant specification and evidence of record fail to attribute any significance (novel or unexpected results) to a particular shape, a change of shape is generally recognized as being within the level of ordinary skill in the art. *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966).

Regarding claim 26, Saito discloses the claimed invention except for the cross-section of the module-housing cavity being substantially semi-circular shaped. It would have been an obvious matter of design choice to change the shape of the module housing from one that has a substantially rectangular cross section to one that has cross-section substantially semi circular shaped, since such a modification would have involved a mere change in the shape of a component. Where the instant specification and evidence of record fail to attribute any significance (novel or unexpected results) to a particular shape, a change of shape is generally recognized as being within the level of ordinary skill in the art. *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966).

4. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Saito (US 5,994,643) in view of Chang (US 5,153,380).

Regarding claim 23, Saito discloses the claimed invention except for the module housing including a knife-shaped edge that bites into a bottom surface of the lid when the lid is pressed onto the module housing to form a metal to metal contact sealing means. Chang teaches a module package comprising: a lid having a bottom surface;

and a module housing (1) having a knife-shaped edge (111); wherein the lid (4) and the module housing (1) are sealed when the knife-shaped edge (111) bites into the bottom surface of the lid to form a sealing mechanism (see figures 4a and 4c; or see column 2 lines 28-41). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make Saito's housing with a knife-shaped edge that bites into a bottom surface of the lid when the lid is pressed onto the module housing to form a metal to metal contact sealing means as taught by Chang to provide means for firmly securing the lid to the module housing.

5. Claims 15-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saito (US 5,994,643) in view of Chang (US 5,153,380) as applied in claim 23 and further in view of Shu (US 4,567,318).

Regarding claim 15, the modified Saito discloses the claimed invention except for the lid being made of a soft aluminum material and the module housing is made of a soft aluminum material. Shu teaches a fiber optic module package (see figure 4) comprising a lid (12) and a module housing (11) having knife-shaped edge (34) for forming a sealing mechanism; said lid (12) is made of soft aluminum material (column 4 lines 14-18) and the module housing is made of a soft metal material (column 3 lines 36-40 or column 4 lines 48-55). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the modified Saito's module package with a lid made of a soft aluminum material and the module housing made of a hard aluminum material as taught by Shu to facilitate the assembly process between the

lid and the housing. Furthermore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the lid of a soft aluminum material and the module housing of a hard aluminum material, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

Regarding claim 16, Shu teaches the fiber optic module package (see figure 4) wherein the lid (12) is made of a hard aluminum material and the module housing (11) is made of a hard aluminum material (column 4 lines 48-55).

Regarding claim 17, the modified Saito discloses the claimed invention except for the lid being made of a hard aluminum material and the module housing is made of a hard aluminum material. Shu teaches a fiber optic module package (see figure 4) comprising a lid (12) and a module housing (11) having knife-shaped edge (34) for forming a sealing mechanism; said lid (12) is made of soft aluminum material (column 4 lines 14-18) and the module housing is made of a soft metal material (column 3 lines 36-40 or column 4 lines 48-55). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the modified Saito's module package with a lid made of a soft aluminum material and the module housing made of a hard aluminum material as taught by Shu to facilitate the assembly process between the lid and the housing. Furthermore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the lid of a soft aluminum material and the module housing of a hard aluminum material, since it has been held to

be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

Regarding claim 18, the modified Saito discloses the claimed invention except for the lid being made of a first material and the module housing being made of a second material. Shu teaches a fiber optic module package (see figure 4) comprising a lid (12) and a module housing (11) having knife-shaped edge (34) for forming a sealing mechanism; said lid (12) is made of a first material (column 4 lines 14-18, soft aluminum) and the module housing (11) is made from a second material (column 3 lines 36-40 or column 4 lines 48-55, e.g. zinc). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the modified Saito's module package with a lid from a first material and the module housing from a second material as taught by Shu to facilitate the assembly process between the lid and the housing. Furthermore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the lid of a soft aluminum material and the module housing of a hard aluminum material, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

Regarding claim 19, Shu teaches the fiber optic module package (see figure 4), wherein the first material of the lid (12) comprises aluminum alloy, stainless steel, copper, or titanium (column 4 lines 14-16).

Regarding claim 20, Shu teaches the fiber optic module package (see figure 4), wherein the second material of the module housing (1) comprises aluminum alloy, stainless steel, copper, or titanium (column 3 lines 36-40 or column 4 lines 48-55).

Regarding claim 21, the modified Saito discloses the claimed invention except for the lid being made from the same material as the module housing. Shu teaches a fiber optic module package (see figure 4) comprising a lid (12) and a module housing (11) having knife-shaped edge (34) for forming a sealing mechanism; said lid (12) and said housing being made of the same material (column 4 lines 48-62). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the modified Saito's module package with a lid being made from the same material as the module housing as taught by Shu to facilitate the assembly process between the lid and the housing. Furthermore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the lid of a soft aluminum material and the module housing of a hard aluminum material, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

Allowable Subject Matter

6. Claims 1, 2, 6 and 7 are allowed.

Claims 4 and 5 would be allowable if rewritten to overcome the rejection(s) under Claim Objections, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

The following is an examiner's statement of reasons for allowance: The primary reason for the indication of the allowability of claims 1-7 is:

Regarding claims 1-7, the prior art does not teach or fairly suggest in combination with the other claimed limitations a lid having a slot with an outer wall and a module housing having a knife-shaped edge and a side slot.

This limitation is found in claims 1-7, and is neither disclosed nor taught by the prior art of record, alone or in combination.

Conclusion

7. Any inquiry concerning this communication should be directed to Angel R. Estrada at telephone number (571) 272-1973. The Examiner can normally be reached on Monday-Friday (8:30 -5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on (571) 272-2800 Ext: 31. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

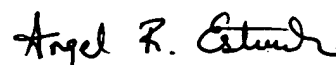
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

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For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

August 3, 2005



Angel R. Estrada
Patent Examiner
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